What Is Claimed Is:

1. A process for preparing a nucleic acid sample, comprising the steps of;

(a) providing a nucleic acid sample having plural species of sequences, and providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of said nucleic acid sample,

(b) mixing and hybridizing said nucleic acid sample with said probes, and

(c) subsequently recovering nucleic acid molecules not being hybridized with the probes.

2. A process for preparing a nucleic acid sample, comprising the steps of;

(a) providing a nucleic acid sample having plural species of sequences, and providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of said nucleic acid sample,

(b) mixing and hybridizing said nucleic acid sample with said probes, and

(c) treating the product of step (b) with nuclease activity of a enzyme or the probe itself,

(d) subsequently recovering the nucleic acid molecules not digested by said nuclease activity in step (c).

3. A process for preparing a nucleic acid sample, comprising the steps of;

(a) providing a nucleic acid sample having plural species of sequences and oligonucleotide primers having predetermined sequences for synthesizing DNA strands, and

(b) providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of said nucleic acid sample and having such a structure as to prevent a polymerase reaction from its 3' end and a nuclease reaction from its 5' end, and

(c) mixing and hybridizing said nucleic acid sample with said primers and said probes, and

(d) execution of polymerase reaction for the samples prepared in step (c), and

(e) subsequently recovering nucleic acid molecules synthesized in step (d).

4. The method according to clam 1, wherein said probe carrier is immobilized onto a solid phase including a bead or substrate.

5. The method according to clam 2, wherein said probe carrier is immobilized onto a solid phase including a bead or substrate.

6. The method according to clam 3, wherein

said probe carrier is immobilized onto a solid phase including a bead or substrate.

7. The method according to clam 1, said process further comprising the steps of :

(a)checking the amount and purity of nucleic acids bound to said probe , and

(b)judging the necessity of further process of clam 1 by the result of step (a).

8. The method according to clam 2, said process further comprising the steps of :

(a)checking said amount and purity of nucleic acids bound to said probe , and

(b)judging the necessity of further process of clam 2 by the result of step (a).

9. The method according to clam 4, said process further comprising the steps of :

(a)checking said amount and purity of nucleic acids bound to said probe , and

(b)judging the necessity of further process of clam 4 by the result of step (a).

10. The method according to clam 5, said process further comprising the steps of :

(a)checking said amount and purity of nucleic acids bound to said probe , and

(b)judging the necessity of further process of clam 5 by the result of step (a).

11. A nucleic acid sample obtained through the steps of :

(a)providing a nucleic acid sample having plural species of sequences, and providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of said nucleic acid sample,

(b)mixing and hybridizing said nucleic acid sample with said probes, and

(c)subsequently recovering nucleic acid molecules not being hybridized with the probes.

12. A nucleic acid sample obtained through the steps of;

(a) providing a nucleic acid sample having plural species of sequences, and providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of said nucleic acid sample,

(b) mixing and hybridizing said nucleic acid sample with said probes, and

(c)treating the product of step (b) with nuclease activity of a enzyme or the probe itself, and

(d) subsequently recovering the nucleic acid

molecules not digested by said nuclease activity in step (c).

13. A nucleic acid sample obtained through the steps of ;

(a) providing a nucleic acid sample having plural species of sequences and oligonucleotide primers having predetermined sequences for synthesizing DNA strands, and

(b) providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of said nucleic acid sample and having such a structure as to prevent a polymerase reaction from its 3' end and a nuclease reaction from its 5' end, and

(c) mixing and hybridizing said nucleic acid sample with said primers and said probes,

(d) execution of polymerase reaction for the samples prepared in step (c), and

(e)subsequently recovering nucleic acid molecules synthesized in step (d).

14. A synthesizing method of a probe carrier used for removing one or plural abundant genes in the nucleic acid sample, said method using a resin-bonded 3'nucleoside designed to prevent a polymerase reaction from its 3' end.

15. A kit for removing nucleic acids hybridized with probe carriers comprising the steps of providing a nucleic acid sample to be analyzed and probe carrier having a known sequence being substantially complementary to a portion of sequence of abundant expressed genes in the said nucleic acid sample, removing one or plural abundant genes by mixing and hybridized said probe carriers with said nucleic acid sample, recovering nucleic acid sample not being hybridized with said probe carriers, which kit comprising :

a set of probe carriers being hybridized with one or plural abundant genes in said nucleic acid sample, having such a structure as to prevent a polymerase reaction from its 3' end.

16. A kit according to clam 15, wherein said probe carriers having resistance to nuclease activity.

17. A kit according to clam 15, wherein said probe carriers having nuclease activity itself.

18. A apparatus for removing nucleic acids hybridized with probe carriers comprising the steps of providing a nucleic acid sample to be analyzed , removing one or plural abundant genes by mixing and hybridized said probe carriers with said nucleic

acid sample, recovering nucleic acid sample not being hybridized with said probe carriers, which apparatus comprising :

two filtering units,

a first filtering unit having a structure for chemically or physically retaining nucleic acids hybridized with said probe carriers, and

a second filtering unit having a structure to prevent nucleic acids from permeating and allow water and inorganic salts to permeate.

19. A apparatus according to clam18, further comprising a structure for allowing electrophoresis for migrating said nucleic acid sample from the first filtering unit to the second filtering unit.

20. A commercial service of preparation of nucleic acid sample for removing nucleic acids hybridized with probe carriers comprising the steps of:

(a)receiving a nucleic acid sample from customer, and

(b)providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of abundant expressed genes in the said nucleic acid sample, and

(c)recovering nucleic acid sample not being hybridized with said probe carriers by mixing and hybridizing said nucleic acid sample with said primers and said probes , and

(d)return the nucleic acid sample prepared in the step (c) to the customer.

21. A Method for analyzing a nucleic acid sample, comprising the steps of;

(a) providing a nucleic acid sample having plural species of sequences, and providing one or plural kinds of probes having a known sequence being substantially complementary to a portion of sequence of said nucleic acid sample,

(b) mixing and hybridizing said nucleic acid sample with said probes, and

(c) subsequently recovering nucleic acid molecules not being hybridized with the probes.